REMARKS

Upon entry of this paper, claims 1, 5, 6, 7, 13, 14, 19, 23, 24, 25, 32, 33, 34, 38, 40, 44, 45, 46, 47, 50, 51, and 52 have been amended, claims 4, 8, 9, 11, 12, 22, 26, 29, 30, 31, 39, 41, 42, 43, 48, 49, and 53 have been canceled, and no claims have been added as new claims. Thus, claims 1-3, 5-7, 10, 13-21, 23-29, 32-38, 40, 44-47, and 50-52 are presently pending in this application. No new matter has been added.

Applicants thank the Examiner for the telephone interview of June 7, 2005. Based on the discussion during the interview, Applicants have amended the claims to provide further clarification of the present invention in accordance with the Examiner's suggestion. In addition, Applicants have provided further remarks concerning the applicability of the applied references to the pending claims.

Claim Rejections under 35 U.S.C. §103

Claims 1-3, 19-21, 38, 49-51, and 53

Claims 1-3, 19-21, 38, 49-51, and 53 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over US Patent No. 6,614,430 to Rappoport ("Rappoport '430"). Independent claims 1, 19, 38, 46, 50, 51, and 52 have been amended to more clearly identify the present invention. Independent claims 49 and 53 have been canceled. Applicants provide further remarks concerning this rejection as follows.

Rappoport '430 is generally directed to a method and apparatus for mechanical data exchange between parametric computer aided design systems ("CAD"). According to an embodiment, computer-implemented methods, techniques and structures are employed to extract data classes from a source CAD file and create a second set of data classes in a CAD file for a

different CAD system. Rappoport uses planning stages and extraction stages, with programmer interaction required, to implement data transfer between CAD programs.

The Office Action states that, "it would have been an obvious modification to apply the extraction API through a plug-in for enabling access to the first CAD data by the second CAD application, because a plug-in would facilitate the adaptive extensions for communicating the specified data." OA, page 3. However, Applicants respectfully submit that such a modification is contrary to the teachings of Rappoport '430 itself.

Rappoport '430 explicitly teaches away from the use of an API providing access to other CAD applications for the exchange of data, when it states that the "system and method of this invention enable the exchange of a range of data classes that is typically wider than existing methods, and provide the capability of extracting data from and importing data into systems without requiring the systems to expose their data through a programming interface." *See* col. 5, line 66, to col. 6, line 4.

Specifically, Rappoport '430 explicitly teaches away from the use of a plug-in *"for enabling access to the first CAD data by the second CAD application (see OA, page 3)"* when it states that the invention of Rappoport '430, "provide[s] the capability of extracting data from and importing data into systems *without requiring the systems to expose their data through a programming interface (see col. 6, lines 2-4).*"

In further support of the innovative use of plug-ins in the present claimed invention, Applicants draw the Examiner's attention to the specification at page 10, beginning at line 13, where it confirms that, "[b]ecause the plug-in 52 can access the native data files of the CAD-A application 40, there is no requirement of the CAD-A application 40, or user thereof, to initiate an exporting process to transfer the data. In other words, the plug-in 52 knows where to find the necessary data in the native files of the CAD-A application 40. Therefore, every time a change is made in the CAD-A application 40, other applications such as the CAD-B applications 60 can read the updated sub-set of part native data 46 information and the sub-set of assembly native data 50 information. The interoperability is achieved by the provision of the plug-in 52 by each

vendor making an application such as the CAD-A application 40 for creating models of objects or otherwise manipulating the modeled objects."

Further, as discussed in the Background of the pending application, there is often a desire to have the ability to share CAD data and move such data from one application to another application without being undesirably hindered by the requirement that a user at the originating CAD system perform several tasks to prepare the data and export it to the second CAD system, which requires communication between users of different CAD systems to share this information. Rappoport '430 is one such application that requires that the user of the originating CAD system perform several tasks to prepare data for export. As described at col. 7, lines 19-33, the method of Rappoport '430 requires that a planning stage be performed prior to the two systems communicating. Furthermore, the extraction planning stage requires a programmer to study the data model of the source system to devise a plan for extracting data (*see* col. 8, lines 1-12).

Accordingly, Rappoport '430 does not teach or suggest, and in fact teaches away from, a method of communicating between a first CAD application and a second CAD application, comprising . . . "providing a plug-in comprising a second library of routines having an application program interface (API) and being accessible by the second CAD application; and the plug-in conveying the sub-set of native data to second CAD application . . ." *See* amended claim 1, see also claims 19 and 50 (*see further* amended claim 38, which requires "a plug-in having a second library of executable routines and an API accessible accessible by the second CAD application and suitable for accessing and retrieving the sub-set of native data to enable the second CAD application to create a second model of at least a portion of the object modeled on the first CAD application without the first CAD application having to export a file containing the object" and *see also* claim 51, *see also* further amended claim language.)

Applicants therefore respectfully submit that Rappoport '430 fails to teach or suggest every characteristic of any of Applicants' independent claims, including claims 1, 19, 38, 46, and 50-52. Claims depending therefrom are also allowable based on their dependency on the aforementioned independent claims in addition to their own claimed characteristics. Applicants

further submit that all pending claims of the present invention are not obvious with respect to, and are therefore allowable over, Rappoport '430.

Claims 4-18, 22-37, 39-48, and 52

Claims 4-18, 22-37, 39-48, and 52 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Rappoport '430 and in further view of US Patent No. 6,542,937 to Kask ("Kask '937"). Independent claims 1, 19, 38, 46, 50, 51, and 52 have been amended to more clearly identify the present invention. Independent claims 49 and 53, and dependent claims 4, 8, 9, 11, 12, 22, 30, 31, 39, 41, 42, 43, and 48, have been canceled. Applicants provide further remarks concerning this rejection as follows.

Dependent claims 4-18, 22-37, 39-45, 47, and 48 (to the extent they haven't been canceled herein) all depend from independent claims discussed previously with regard to the Rappoport '430 reference. None of the failures of the Rappoport '430 reference to make obvious the pending claims are overcome by the disclosure of Kask '937. Kask '937 merely discusses the use of library based API's. The teaching away by Rappoport '430 of the use of API's prevents the combination of Rappoport '430 with Kask '937 in the context of using libraries to implement API's. As such, the aforementioned dependent claims are allowable based in part on their dependencies on allowable base claims, in addition to their own claimed characteristics.

Independent claims 46 and 52 each include the limitation of, "providing a second library of executable routines in the form of a plug-in having an application program interface (API) and being accessible by the second CAD application; and calling the second library of executable routines to utilize the API to retrieve the native data, filter the native data to extract the sub-set of native data, and convey the sub-set of native data to the second CAD application." *See* claims 46 and 52.

Neither Rappoport '430, nor Kask '937, in combination or individually, teach or suggest providing or using a plug-in having an API accessible by a second CAD application, which can utilize the API to retrieve native data from a first CAD application as claimed (see claims 46 and

14

52). Furthermore, neither Rappoport '430, nor Kask '937, in combination or individually, teach or suggest "calling a third library of executable routines to create model items based on the native data and a sub-set of native data of the first CAD application" (*see* amended claim language) as contained in claims 46 and 52. As such, claims 4-18, 22-37, 39-48, and 52 (to the extent they haven't been canceled herein) cannot be viewed as obvious in light of Rappoport '430 and Kask '937.

Applicants therefore respectfully submit that Rappoport '430 in view of Kask '937 fails to teach or suggest every characteristic of any of Applicants' independent claims, including the remaining claims from those rejected. Applicants further submit that all pending claims of the present invention are not obvious with respect to, and are therefore allowable over, Rappoport '430 and Kask '937.

CONCLUSION

In view of the foregoing, it is respectfully submitted that this application is now in condition for allowance. Applicants courteously solicit allowance of the claims in the form of a Notice of Allowance. Should there be any outstanding issues of patentability following the entry of this response, a telephone interview is respectfully requested to resolve such issues.

Applicants believe no fee is due with this statement. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. PAS-163 from which the undersigned is authorized to draw.

Dated: July 6, 2005

Respectfully submitted,

By
Sean D. Detweiler
Registration No.: 42,482
LAHIVE & COCKFIELD, LLP
28 State Street
Boston, Massachusetts 02109
(617) 227-7400
(617) 742-4214 (Fax)
Attorney/Agent For Applicant